Amendments to the Specification:

Please replace the Abstract in its entirety with the following new Abstract; the new Abstract on a separate sheet, as required by 37 C.F.R. § 1.72, is annexed hereto:

~~Disclosed is a method and apparatus for a~~ A control management system ~~having~~ provides a plurality of software controllable devices coupled to a network wherein each device has at least one property to be controlled and a plurality of clients for changing the properties of at least one device. ~~Disclosed is an~~ An event manager ~~that~~ acts as an interface between the clients and the devices. The event manager maintains a persistence store of all the properties being controlled in the home control management system and the current values of the properties. When the client requests status information of the properties it controls, the event manager provides this information to the client thereby avoiding the need for the client to separately query each individual device.

Please replace paragraph [03] with the following amended paragraph:

[03]   Early advances in consumer devices and appliances were limited to remote control devices that, at first, were wired to the device, and eventually used infrared (IR) communications to transmit commands. The remote control devices, however, still forced the user to interact with their respective devices on a one-to-one basis. In addition, most hand-held remote control devices were proprietary, which required separate remote controllers for each consumer product. Further advancements included universal remote controllers that were capable of being programmed to control many ~~devices~~ consumer devices. Universal remote control devices were limited in that they were typically not able to control devices other than entertainment equipment.

Please replace paragraph [09] with the following amended paragraph:

[09]   In view of the above, there is a need for a system that efficiently provides to user interfaces setting information of the devices being controlled. There is also a need to aggregate devices in the home, including their properties, and to categorize them by location and type. There is also a need to allow UI clients to request specific information to ~~keeps~~ keep traffic

between all the devices and the IUUI clients to a minimum. The present invention provides a solution to address these and other limitations and shortcomings of the prior art.

Please replace paragraph [24] with the following amended paragraph:

[24]   A basic input/output system 160 (BIOS), containing the basic routines that help to transfer information between elements within the personal computer 100, such as during start-up, is stored in ROM 140. The personal computer 100 further includes a hard disk drive 170A for reading from and writing to a hard disk, not shown, a magnetic disk drive 180 for reading from or writing to a removable magnetic disk 190, and an optical disk drive 191 for reading from or writing to a removable optical disk 192 such as a CD ROM or other optical media. The hard disk drive 170A, magnetic disk drive 180, and optical disk drive 191 are connected to the system bus 130 by a hard disk drive interface 192, a magnetic disk drive interface 193, and an optical disk drive interface 194, respectively. The drives and their associated computer-readable media provide nonvolatile storage of computer readable instructions, data structures, program modules and other data for the personal computer 100.

Please replace paragraph [27] with the following amended paragraph:

[27]   The personal computer 100 may operate in a networked environment using logical connections to one or more remote computers, such as a remote computer 109. The remote computer 109 may be another personal computer, a server, a router, a network PC, a peer device or other common network node, and typically includes many or all of the elements described above relative to the personal computer 100, although only a memory storage deviceCPU 111 has been illustrated in FIGURE 1. The logical connections depicted in FIGURE 1 include a local area network (LAN) 112 and a wide area network (WAN) 113. Such networking environments are commonplace in offices, enterprise-wide computer networks, intranets and the Internet.

Please replace paragraph [34] with the following amended paragraph:

[34]   The clients 210 are generally User Interface (UI) components that allow a user to interact with and remotely control the software controllable devices 205 via software instructions. Such

clients 210 are general-purpose computing devices including, for example without limitation, a personal computer such as a notebook (laptop) computer 49, a hand-held computing device 63, a desktop PC/server 20, remote control devices, wall switches, voice user interfaces, iris scanners, and the like. Although not required, the notebook computer 49 preferably operates utilizing WINDOWS® 95/98 or WINDOWS NT® 4.0 Workstation (or higher) brand operating systems. Again, although not required, the hand-held computing device 63 preferably operates running WINDOWS® CE 2.0 (or higher) brand operating system. The PC/Server 20 preferably runs the WINDOWS NT® 4.0 Workstation or Server (or higher) brand operating system. The general purpose computing devices 20, 49 and 63 may also act as or with "consumer presentation displays" (CPD) 230, 232 and 234 to provide a coherent and transparent interface to users across all network media 236 and topologies.

Please replace paragraph [36] with the following amended paragraph:

[36]   Although not shown in FIGURE 2, each device 205 preferably includes a microprocessor or a microcontroller and a read-only memory containing an embedded operating system (e.g., WINDOWS® CE 2.0 (or higher)). The embedded operating system and/or an application running on the operating system serves to control the functions of the device 205. The methods provided by control objects (discussed below) may be executed by the operating system or the software application. It is preferable that the operating system of the device 205 includes application programming interfaces (APIs) to enable each device's attendant control object to control the device 205 based on the information contained within the control object. APIs are generally routines, protocols, and/or tools for building software applications by providing the building blocks that a programmer may use to develop an application. Programs using a common API will have similar interfaces. Such as a structure would allow device manufacturers to use the control object CO, application software, and/or the device operating system to implement functions that would be appropriate for the manufacturer's specific device or service (e.g., providing play and record functions within a VCR).

Please replace paragraph [41] with the following amended paragraph:

[41]   The methods provided by the control objects CO (discussed below) may be executed by the operating system or the software application. It is preferable that the operating system of the devices 205 include application programming interfaces (APIs) to enable each device's attendant control object CO to control the device 205 based on the information contained within the control object CO. Such as a structure would allow device manufacturers to use the control object CO, application software, and/or the device operating system to implement functions that would be appropriate for the manufacturer's specific device or service (e.g., providing play and record functions within the VCR 214).

Please replace paragraph [45] with the following amended paragraph:

[45]   Since a property may be changed by any number of clients 210 or even manually by the user, it becomes desirable to for a client 210 to readily learn the status of one or more properties of any given device 205. The event manager 250 thereby serves as a source for clients 210 to readily obtain status information for the various device properties. When a new client 210 starts-up, it contacts the event manager 250 and subscribes to the various properties that the client 210 controls and retrieves the property values for each of the subscribed properties. The client 210 subsequently polls the event manager 250 to receive updates to any possible changes to the subscribed properties since the previous query. The client 210 thereby remains synchronized with all property changes for the properties that it controls.

Please replace paragraph [46] with the following amended paragraph:

[46]   As discussed above, the control object CO exposes the properties of its associated device 205. For example, the control object CO for a CD player device may have exposed properties such as Power, Mode, Track Number, and CD Number. As another example, the control object CO for a TV device may have exposed properties such as power, Input Mode (e.g., video 1 or video 2), and Channel. The event manager 250 stores and organizes these properties and in a meaningful way that can be readily accessed by the clients 210.

Please replace paragraph [47] with the following amended paragraph:

[47]   As illustrated in FIGURE 4, the event manager 250 exposes a Persistence Store container ~~1405~~ 405 that tabulates and stores a comprehensive listing of each control object CO and the various parameters of each control object CO. The parameters identified in the Persistence Store 255 for each control object CO include, for example, an identification (ID) of the control object CO, a name of the control object CO, a location of the associated device 205 (e.g., by room), an exposed properties listing of the associated device 205, and a property descriptor. The exposed properties listing identifies the properties exposed by the control object CO for the associated device 205. The property descriptor parameter provides a description of each of the various exposed properties identified in the exposed properties listing. Accordingly, the Persistence Store 255 provides a wealth of information about the various devices 205 in the networked environment. In a preferred embodiment, the proper descriptor is an XML block that enumerates the various exposed properties and describes the types and ranges of values that the exposed properties may have.

Please replace paragraph [57] with the following amended paragraph:

[57]   Yet another advantage of the present system is that clients 210 do not require constant connection to the system. Rather, the clients 210 merely query the event manager 250 for property status information. Thus, if any DCOM-enabled client 210 loses connection to the system, it does not have to log back on, re-do the connection, and re-subscribe ~~the~~ to the properties that it seeks.

Please replace paragraph [58] with the following amended paragraph:

[58]   It will be apparent to those skilled in the art that the foregoing examples have been provided merely for the purpose of explanation and are in no way to be construed as limiting of the present invention. While the invention has been described with reference to preferred embodiments, it is understood that the words that have been used herein are words of description and illustration, rather than words of limitations. For example, while the devices 212-222 have been illustrated as a game device, a video device, a telephone, a smart AC outlet, an answering machine, and a television, other devices that may be controlled include, but are not limited to, personal computers, security systems, dishwashers, etc. In addition, other operating systems

than the Microsoft WINDOWS® family may be provided with the appropriate APIs to implement the features of the invention. Further, although the invention has been described herein with reference to particulars disclosed herein; rather, the invention extends to all functionally equivalent structures, methods and uses, such as are within the scope of the appended claims.